

**DRAFT – 10/25/01**

# **FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE**

**First Annual Report**

***October 2001***

**Office of Federal Energy Management Programs  
Energy Efficiency and Renewable Energy  
U.S. Department of Energy**

# FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE

## ANNUAL REPORT

***October 2000 – September 2001***

*Executive Order 13123 – Greening the Government through Efficient Energy Management*, was signed on June 3, 1999, to enhance existing Federal energy management provisions as prescribed in the *Energy Policy Act of 1992*.

The executive order created several new initiatives including the Federal Energy Management Advisory Committee (FEMAC). The purpose of the advisory committee is to provide the Department of Energy (DOE) with input on a range of issues critical to meeting mandated Federal energy management goals.

On October 2000, the Secretary of Energy selected ten individuals (see Attachment A) to serve on the committee, which is chaired by Beth Shearer, the Director of the Department of Energy's Office of Federal Energy Management Programs (FEMP). In compliance with the executive order, the committee is composed of officials from Federal and state governmental agencies; the energy service, utility, and equipment manufacturing industries; the building design and construction professions; and other energy organizations.

### **INTRODUCTION – *FIRST YEAR MEETINGS***

This annual report summarizes the first year activities of the Department of Energy's Federal Energy Advisory Committee. During the first year of operation (October 2000 through September 2001), FEMAC held three public meetings in Washington, DC:

- October 23-24, 2000
- January 25-26, 2001
- April 17-18, 2001

FEMAC held a fourth public meeting in Kansas City, Missouri, on June 4, 2001. Conducted as a special session of the Department of Energy's annual workshop and exposition, *Energy 2001*, FEMAC received comments and recommendations from the event's participants, which included a wide range of professions and interests. Input was provided by Department of Energy Regional Office Support staff, Federal agency energy coordinators and facility managers, equipment manufacturers, energy service companies, and other interested parties.

In addition to conducting periodic meetings throughout the year, FEMAC also established the following:

- FEMAC bulletin board ([www.femac.net](http://www.femac.net)) to post meeting summaries and encourage interactive discussions among members and with Federal Energy Management Program office staff.
- Two working groups to explore specific issues identified by FEMAC as priorities for advancing energy management in the Federal sector.

## MEETING COORDINATION AND FORMAT

To comply with guidelines regarding Federal advisory committees, FEMAC meets in a public forum; each meeting is announced in the *Federal Register* 15 days in advance of the actual meeting. The Department of Energy's Office of Federal Energy Management Programs coordinates FEMAC meetings, advisory committee working groups, an interactive bulletin board, and the preparation and distribution of energy-related material to advisory committee members. Membership (see Attachment A) is composed of a cross-section of interests including officials representing the Federal Government; state governmental entities; utilities and energy service companies; equipment manufacturers and the design profession; energy and environmental public interest groups; and other interested parties. Meetings generally occur over a period of one and half days; the format includes a mixture of presentations on Federal energy management program activities, facilitated discussions among FEMAC members, and comments from the public. Beth Shearer, the Director of FEMP, serves as the committee chair and Steven Huff of FEMP serves as FEMAC's Designated Federal Official and meeting facilitator.

Provided below is a summary of FEMAC recommendations and the general themes and priorities that have emerged from FEMAC member discussions. In addition, more detailed meeting-related information is provided in attachments at the end of this report. The Department of Energy maintains a summary of each meeting in the agency's Public Information Room at DOE Headquarters in Washington, DC.

## SUMMARY – FEMAC Recommendations and Themes of Discussion

As a result of a facilitated discussion during the first meeting of the advisory committee, members selected seven priorities for FEMAC to focus on as a group. For each topical area, members suggested specific "opportunities" that should be considered for further examination. The seven topical areas include the following:

- **Project Financing** (Energy Saving Performance Contracts, Utility Energy Service Contracts)
- **Implementation of Executive Order 13123** (Greening the Government through Efficient Energy Management)
- **Information** (information dissemination, information exchange among Federal agencies)
- **Roles and Responsibilities** (FEMP, Federal agencies, partnership with states, utilities, and others)

- **Policy Clarifications** (enabling authorities, national energy policy, new opportunities)
- **External Drivers** (impact on Federal energy management activities)
- **Management and Accountability** (budgets, achievement of goals, measuring performance)

The seven topics and corresponding opportunities are listed in more detail in Attachment B.

Throughout the first year of operation, the committee raised and examined a variety of issues associated with the seven topics of interest listed above. However, four general themes captured the interest of committee members:

- FEMP's FY 2002 Budget
- ESCPs/Alternative Financing
- Sustainable Design
- Innovations/New Technologies

During the course of the first year of FEMAC, advisory committee members provided a number of recommendations and comments regarding program activities. These recommendations and comments are a result of open discussions among the group, response to presentations made by FEMP staff, and through facilitated problems-solving sessions.

### **Recommendation: Preserve funding for and reform of ESPCs and other project financing mechanisms**

- October 23-24: Address impediments to implementing ESPCs.
- October 23-24: Use multi-disciplinary teams in project financing.
- October 23-24: Examine opportunities for using the FEMP budget to leverage Federal, state, and private sector funding.
- March 29: Look to the private sector for financing support if ESPC funding is cut.
- March 29: Reduce uncoded balances with National Laboratories, et al., to free up funding for project financing.
- March 29: Make project financing an area of emphasis in FEMP budget.
- March 29: Consider reducing funding for the Design Assistance program and redirect funding to support higher priority activities.
- April 11: Direct as a priority, funding for ESPCs and other project financing activities including working with other EERE sectors to better leverage financial resources.
- April 17-18: Prove the benefits of ESPCs through metering.
- April 17-18: Identify DOE resources that have triggered other Federal, state, local, or industrial investments. Eliminate initiatives that have other champions.

**Recommendation: Improve the measurement of project benefits**

- January 25-26: Conduct job-test analyses to determine the needs of field personnel and determine the level of effectiveness of FEMP to respond to those needs.
- January 25-26: Develop standard criteria for goals, such as the LEED standards.
- January 25-26: Focus on measurement and cost savings.
  
- April 11: Demonstrate performance with measurable goals.
  
- April 17-18: Benchmark and track activities over time.
- April 17-18: Decide on a performance measure to compare projects and weigh their relative merit.
- April 17-18: Prove the benefits of ESPCs through metering.

# ATTACHMENTS

## ATTACHMENT A:

FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE  
*Membership*

## ATTACHMENT B:

FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE  
*Topics of Interest & Possible Development*

## ATTACHMENT C:

FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE  
*SUMMARY OF KEY RECOMMENDATIONS*

## Attachment A

### FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE

#### *Membership*

**FEDERAL AGENCIES** Cynthia Vallina,  
*Office of Management and Budget*

**STATE GOVERNMENTS** Kenneth Calvin,  
*Interim Director, Mississippi State Energy Division*

**ENERGY SERVICE COMPANIES** Erbin Keith, *Exec VP/Counsel, CES/Way International Sempra Energy Subsidiary (mechanical engineer/lawyer)*

**UTILITY COMPANIES - ELECTRIC/GAS (IOU)** Robert Collins,  
*Principal Engineer State/Federal Governmental Accounts Manager, Tampa Electric (also West Point graduate, Army Reserves)*

**UTILITY COMPANIES - ELECTRIC (PUBLIC)** Mary M. Palomino,  
*Energy Conservation Manager, Salt River Project, Phoenix, AZ*

**EQUIPMENT MANUFACTURERS** Jared Blum,  
*Polyisocyanurate Insulation Manufacturers Association*

**CONSTRUCTION AND ARCHITECTURAL COMPANIES** Vivian Loftness,  
*Professor of Architecture, Center for Building Performance & Diagnostics, Head School of Architecture, Carnegie Mellon University*

**ENVIRONMENTAL, ENERGY AND CONSUMER GROUPS** Richard W. Earl,  
*Senior VP/Manager, Facilities Consulting and O&M, PB Facilities (Parsons-Brinkerhoff Company)*

**OTHER ENERGY-RELATED ORGANIZATIONS** Stuart Berjansky,  
*Product Manager, Advance Transformer Company, A Division of Philips Lighting (engineer with specialty in illumination); formerly with Xenergy (ESCO), experience with Pentagon lighting project, other Federal/State projects.*

**FEDERAL AGENCIES** Shelley N. Fidler, *Former Principal Deputy, White House Climate Change Task Force Currently Partner, Van Ness Feldman;*

**CHAIR** Beth Shearer,  
*Director of Federal Energy Management Programs, U.S. Department of Energy*

## Attachment B

# FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE

## Topics of Interest & Possible Development

*October 24, 2000*

<b>Project Financing</b>	<b>Executive Order Implementation</b>	<b>Information</b>	<b>Roles and Relationships</b>	<b>Policy Clarifications</b>	<b>External Drivers</b>	<b>Management &amp; Accountability</b>
Determine impediments to implementing ESPCs/UESCs in Federal facilities	Listen to agency feedback on E.O. implementation	Improve communication among Federal agencies	Increase collaboration among Federal agencies	Examine externalities: health, energy security, productivity	Examine externalities: health, energy security, productivity	Determine impact of multi-year budgets
Identify “Best Practices” to overcome impediments	Examine agency energy teams and determine their needs	Determine energy efficiency information needs of Federal agencies	Examine agency energy teams and determine their needs	Integrate national security and energy	Identify Federal and market initiatives that DOE/FEMP can build on	Determine impact of outsourcing energy goals
Achieve “Best Value” with competition and guarantees in UESCs	Consider agency culture as a factor	Ensure effective use of agency data	Prioritize goals for Federal government and industry	Incorporate UESCs and ESPCs in new construction	Incorporate energy efficiency in historic properties	Consider financial penalties for not meeting goals
Implement water conservation ESPCs	Assess real sense of likelihood of compliance	Integrate private sector data	Capitalize on DOE leadership	Reduce number of facility exemptions from energy management goals	Consider e-commerce for payment of bills	Determine value and benefits of increased metering and measurements
Apply external government funding to buy down ESPC cost	Develop creative ways to encourage agencies to be more compliant with E.O.	Determine impact of consumer reports on products and systems	Enhance Federal/state relationships	Mainstream sustainable design		
	Consider financial penalties for not meeting goals	Incorporate energy within “greening” big picture	Incorporate other DOE initiatives into Federal energy management activities			



# FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE

## Topics of Interest & Possible Development

*October 24, 2000*

<b>Project Financing</b>	<b>Executive Order Implementation</b>	<b>Information</b>	<b>Roles and Relationships</b>	<b>Policy Clarifications</b>	<b>External Drivers</b>	<b>Management &amp; Accountability</b>
	Develop strategies for engaging DOD	Define “green”	Integrate cross-functional activities (e.g., budget, operations, capital teams)			
	Enlist public utility support to help agencies meet goals	Obtain current information on renewables	Enlist public utility support to help agencies meet goals			
	Reduce number of facility exemptions from energy management goals	Enhance the effectiveness of Energy Resource Centers	Link FEMP activities to grants (state and local)			
	Determine value and benefits of increased metering and measurement	Determine value and benefits of increased metering and measurement	Tie economic development to energy efficiency			
	Mainstream sustainable design		Integrate energy procurement with energy efficiency			
			Follow-up on DOE/EPA ENERGYSTAR® program			

## **Attachment C**

### **FEDERAL ENERGY MANAGEMENT ADVISORY COMMITTEE**

#### ***Summary of Key Recommendations***

### **FULL COMMITTEE**

#### **OCTOBER 23-24, 2000 MEETINGS - RECOMMENDATIONS**

##### **Policy**

- Focus on the activities of the new Administration's transition teams.
- Evaluate the FEMP budget and identify long-term opportunities.

##### **FEMAC**

- Establish up to four FEMAC working groups to address specific program-related issues.

##### **Budget**

- FEMAC agreed to focus on the FEMP budget during the first meeting of the advisory committee by establishing a Budget Working Group. Members suggested that FEMP provide the working group with budget documents relating to FY 2002 and FY 2003. The Budget Working Group was charged with reviewing these documents and providing FEMAC and FEMP with specific recommendations regarding program priorities. Specifically, the working group was directed to:
  - Determine how FEMP leverages resources with other Federal agencies and the private sector.
  - Examine the FEMP budget to identify opportunities for leveraging Federal, state, and private sector funding to support Federal energy management projects.

##### **General Energy Efficiency**

- FEMP should focus on the top five energy-consuming Federal agencies.

## **Project-Financing**

- Consider *Executive Order 13123* as FEMP's priority and focus on specific provisions such as ESPCs and sustainable design.
- Use multi-disciplinary teams for project financing.
- Address impediments to ESPCs and sustainable design.

## **Distributed Energy Resources**

- Implement distributed energy resource projects; such projects will serve as an example for the private sector.

## **Renewable Energy Resource**

- Target renewable power generators in addition to traditional ESCOs for Federal energy management projects.

## **Training, Technical Assistance, and Outreach**

- Achieving Federal energy management goals will require an effective outreach program.
- Educate Federal officials on the benefits of energy efficiency and the tools available to saving energy, especially ESPCs.
- Encourage sustainable design and energy efficiency in Federal energy management.

## **JANUARY 25-26, 2001 MEETING - RECOMMENDATIONS**

### **Technical Assistance and Training**

- Select faculty from a variety of universities to conduct energy assessments of Federal industrial facilities.
- Document audits of Federal industrial facilities in a database sorted by industry type; disseminate this information to other industrial facilities in the Federal sector to encourage energy-saving actions.
- Conduct job-test analysis to determine needs of field people and how well FEMP is responding to those needs.
- Eliminate FEMP training courses for which demand is low or topics are covered by other organizations.
- Team with the Office of Building Technologies to develop a course in specification writing for energy efficiency.
- Work with the Construction Specifications Institute to encourage a focus on energy-related issues.
- Develop standard criteria for goals, such as LEED standards.
- Focus on measurement and cost-savings.
- Hold Regional Support Offices accountable for their work.
- Work with smaller agencies before attempting to work with larger ones.
- Determine FEMP's needs from National Laboratories.
- Acquire technical support from not only National Laboratories but from other technical organizations.
- Overlap of expertise exists among National Laboratories; one laboratory should take the lead by forming a Center of Excellence.
- Examine the marketing strategies of the private sector.
- Use Federal journals to promote FEMP goals and role in national security.
- Prepare case studies on the most innovative Federal Energy and Water Management Awards; provide this information on the FEMP web site.

- Provide nominees for the awards with clearer guidance regarding submission of project descriptions.
- Encourage energy efficiency in new construction budgets.

## **APRIL 17-18, 2001 MEETING**

- Use the example of the Government of the Phillipines (modeling their energy program on FEMP) to promote FEMP activities.
- Determine what projects produce revenue or cash flow; present findings as justification for energy efficiency.
- Demonstrate commitment to energy efficiency through training and by promoting technical energy programs in colleges and universities.
- Even after an activity meets Federal energy management goals, consider continuing the activity in order to sustain awareness of the project/program's success.
- Benchmark and track Federal energy management activities over time.
- Use a different language to describe FEMP activities; address the realities and needs of the new Administration.
- Decide on a performance measure to compare projects and weigh their relative merit.
- Avoid cutting funding across program areas; maintain full funding for the most effective FEMP-sponsored programs and reduce funding for lower priority activities.
- Identify DOE resources that have triggered other Federal, state, local, or industrial investments. Eliminate initiatives that have other champions.
- Ask members of the Interagency Energy Management Task Force to encourage their respective energy teams to share information on energy activities with other agencies.
- Select FEMP activities that should be marketed to other Federal groups.
- Encourage other Federal agencies to direct funds to support energy R&D; also encourage industry to request R&D funding from Federal agencies.
- Support regional groups like the Network for Sustainability.
- Prove the benefits of ESPCs through metering.
- Continue energy audits and peak load assessments.

## **JUNE 3-4, 2001 (*Energy 2001 Workshop and Exposition*)**

### **Comments provided by a Representative of the Department of Interior (DOI)**

- Stressed the importance of metrics and measurement of energy consumption.
- Interested in conducting workshops to make agency employees aware of the energy management tools available to them.
- Recommended that DOI partner with DOE as part of a government-wide effort reduce energy consumption in DOI.
- Recommended that the electronic collection of energy consumption data would enable Federal facility managers operating in the field to better manage energy use on a real-time basis.

### **Comments and Recommendations Regarding Project Financing Issues**

- Alternative financing is a complicated process. The process should be streamlined.
- Energy Saving Performance Contracting legislation should be altered to make guarantees optional.

- There is a need to identify the legislative barriers to energy efficiency and alternative financing projects in the Federal Government.
- Reasonableness has to be applied to measurement and verification (M&V) and to project guarantees. A project sold as “no risk” is being oversold. Project managers need to ensure dollars are not wasted.
- Each alternative financing vehicle has an appropriate use and differences between them should be maintained.
- The biggest barrier to alternative financing projects is the lack of incentives for government employees to go through the arduous process of undertaking an ESPC project.
  - Participant from Xenergy comments that the only barrier to doing business with the Federal Government is the lack of willingness on behalf of the government client.
  - People should be rewarded for saving energy rather than merely reprimanded if something goes wrong (e.g., a boiler does not work properly).
  - There should be incentives for using high efficiency equipment.
  - There is a lack of accountability. No one is accountable for meeting energy efficiency goals.

### **Comments and Recommendations Regarding Sustainable Design Issues**

- Narrow the number of standards. The Federal Government should consider abandoning the Federal code and adopting American Society of Heating, Refrigerating and Air-Conditioning Engineers standards (ASHRAE) or something similar.
- FEMP must educate Federal officials about energy efficiency and sustainable design.
- Emphasize the connection between productivity and the indoor environment to obtain more support from Congress.
- Short-term investments are rewarded. The cheaper building will win a bid because it costs less money up front.
- FEMP should ensure that annual Congressional budgets specify that that all new Federal construction projects incorporate minimum Leadership in Energy and Environmental Design (LEED) standards.
- (Department of Commerce Official): There are plenty of opportunities for energy savings including sustainable design. LEED or another standard should become a standard operating procedure so energy management will be easier to achieve.
- FEMP should help agencies connect with the professional communities that serve the Federal Government.

- FEMP and DOE's Atlanta Regional Office should meet with construction companies to make these companies aware of the new possibilities of doing business. DOE staff must be seen as the experts in the field.
- In new design, there are many opportunities to use the tenets of integrated design so that natural ventilation and better design incorporate reduced energy consumption while providing for a productive environment. Managers of existing buildings could benefit from additional energy management information to ensure that these facilities achieve adequate and efficient ventilation.

### **Comments and Recommendations Regarding Budget-Related Issues**

- Funding should come from many sources.
  - Large agencies have a lot of in-house expertise, but do not have adequate funding.
  - There should be a fund for Federal energy efficiency projects.
- Facility management is under-funded. To compete with facility management on conservation issues, separate funding is needed.
- FEMP's energy management awards program is important because it encourages agencies to be more energy efficient.

### **Comments and Recommendations Regarding New and Emerging Technology Issues**

- FEMAC should urge DOE and EPA to expand the ENERGYSTAR<sup>®</sup> program.
  - The program should cover more products.
  - ENERGYSTAR<sup>®</sup> only focuses on products that use less energy rather than products that mitigate energy.
  - ENERGYSTAR<sup>®</sup> does not exist for a lot of Federal categories.
 

It is helpful for office space, but not for laboratories and mixed-use facilities such as the U.S. Postal Service.
  - ENERGYSTAR<sup>®</sup> should be a priority for the General Services Administration.
  - ENERGYSTAR<sup>®</sup> should be used as an educational tool.
  - DOE and EPA have been reluctant to create new product labeling programs.

If ENERGYSTAR<sup>®</sup> is to be expanded, the program should include quality labels to push the boundary further.

## **WORKING GROUP MEETING SUMMARIES**

### **BUDGET WORKING GROUP**

The Budget Working Group met on March 29, April 11, August 21, and August 28, 2001. The purpose of the working group is to examine FEMP funding priorities and to provide recommendations for FY 2002 and FY 2003. The working group is chaired by FEMAC member Richard Earl and has included the participation of the following individuals:

- Steven Huff, FEMP, Designated Federal Office for FEMAC
- Robert Collins, Tampa Electric and FEMAC Member
- Barry Hold, Xenergy, Inc.
- Tanya Sadler, FEMP (no longer with FEMP)
- Skye Schell, FEMP

#### **March 29, 2001**

- Take into account funding cuts for other Federal agencies when examining FEMP's budget and priorities. Examine the activities of other sectors in the Department of Energy's Office of the Assistant Secretary for Energy Efficiency and Renewable Energy (EERE) and determine how FEMP and these other offices can work together to support energy efficiency in the Federal sector.
- Emphasize Utility Energy Savings Contracting and Energy Savings Performance Contracting. If project funding is reduced at other Federal agencies for these types of projects, look to the private sector for financial support.
- Conduct an evaluation of National Laboratory activities to determine the reasons for uncoded balances for FEMP-related activities.
- To ensure that project financing is adequately funded, reduce uncoded balances.
- Emphasize project financing in the FEMP budget.
- Maintain funding levels for outreach and interagency coordination activities, which includes the Interagency Energy Management Policy Committee (656 Committee).
- Emphasize distributed energy resource projects in light of current concerns over electric reliability in the Western Region of the United States.
- FEMP should consider a reduction in funds for the Design Assistance program in order to emphasize other program areas.
- Consider cost sharing projects with other Federal agencies (e.g., prison projects).
- Charge the private sector for training and software programs. FEMP should focus its attention on training programs and establish connections with the private sector.

#### **April 11, 2001**

- Maintain strong funding levels for project financing/ESPCs.
- Identify areas in which FEMP can work with other EERE sectors to leverage funds.
- Articulate impact of budget cuts on objectives; connect budget-funding level to program activity level.
- Prepare alternative scenarios, best and worst cases, and expect a 25 percent reduction in funding for FY 2002.
- Anticipate interagency conflicts over funding levels.
- Demonstrate performance with measurable goals; quantify savings to the government for each project.

## August 21, 2001

- Reduce uncosted balances.
- Leverage funds within other EERE offices.
- Make other offices aware of the benefits of working with FEMP.
- Director of FEMP should work with the other program directors within EERE to develop a plan for joint efforts.
- Incorporate performance measures in the FEMP program.

## August 28, 2001

- Link performance measures to FEMP mission.
- Alter and/or revise FEMP strategy to determine which of the program activities contribute to the overall FEMP mission.
- Alter FEMP culture to one in which performance measures are linked to the FEMP mission.

## **STRATEGIC PLANNING WORKING GROUP**

The Strategic Planning Working Group met on August 23, 2001. The purpose of the working group is to determine the message FEMAC should convey to policy-makers. The working group is co-chaired by FEMAC members Cynthia Vallina of the Office of Management and Budget and Shelley Fidler of Van Ness Feldman, a law firm. Working Group membership also includes:

- Steven Huff, FEMP, Designated Federal Official for FEMAC
- Rob Sandoli, Office of Management and Budget

During the first meeting of the working group, members agreed that the group should focus on broad policy areas, such as examining the two most recent pending comprehensive energy bills, *S. 1358* and *H.R. 4*.

The working group recommended that FEMP take the following actions:

- Provide FEMAC comments and recommendations to the Assistant Secretary for Energy Efficiency and Renewable Energy.
- Give legislative provisions the highest priority.
- Provide an independent assessment of energy management issues.
- Reach out to industry and energy groups to identify crucial issues.
- Evaluate whether FEMP is “getting the most bang for the Federal buck.”
- Reevaluate its program areas and priorities in light of the needs of its customers.
- Set life-cycle cost-effective performance measures